



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,507	06/23/2005	Basile Bonnecaire	033246-0170	6624
22428 7590 04/13/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
SINGH, SUNIL				
ART UNIT		PAPER NUMBER		
3672				
MAIL DATE		DELIVERY MODE		
04/13/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/540,507

**Applicant(s)**

BONNEMAIRE ET AL.

**Examiner**

Sunil Singh

**Art Unit**

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-34 is/are pending in the application.
- 4a) Of the above claim(s) 33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-856)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6, 8-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6, 8-32 are ambiguously constructed and indeterminate in scope because they purport to claim both a product and method of using the product in a single claim.

The claims appear to claim a "connected" and "disconnected" state in the same claim.

This renders the claims indefinite because one cannot determine when the claimed subject matter is being infringed upon. For example, the method steps appear to be "to be lowered", "disconnected", "connected", "submerged and connected", "to retract to a protected position" etc. Claim 2 and 3 now require for the protection means to be connected to the vessel; this now contradicts claim 1 wherein it is disconnected.

A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. \* > IPXL Holdings v. Amazon.com, Inc., 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005); < Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6, 8-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 calls for "the separate unit arranged to be movable in transverse direction with respect to the riser"; such language was not recited in the originally filed disclosure and thus constitutes new matter.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-6, 8-32 are rejected under 35 U.S.C. 101 because they improperly embrace both product or machine and process. The language of 35 U.S.C. 101 sets forth statutory classes of invention in alternative only. See *Ex parte Lyell*, 17 USPQ2d 1549.

See paragraph #1 discussion above.

### ***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 17-22, 24-32 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 7114885. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both call for a riser comprising protection means and stretching or tensioning means.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. Claims 1,2,4,6,8,9,11-14,16, are rejected under 35 U.S.C. 102(b) as being anticipated by Butler et al. (US 5169265).

Butler et al. discloses a riser (14) comprising protection means (60) and stretching or tension means (26,32,44,46). Collar (36). Chains and or wires ((84),see col. 6 line 23+). Coating (40,40a). The protection means are stacked.

11. Claims 1,2,4,6,12,16,17,18,20,22,23,28, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer (US 3813477).

Fischer discloses a flexible riser system comprising: a vessel (10); a flexible riser (11) being configured to be lowered to a submerged, protected position below the sea surface and disconnected from the vessel when the riser is in a non- operative position; and protection means (18) for protecting the riser from impact when the riser is connected to the vessel, the protection means being submerged and covering at least an upper part of the riser when the riser is submerged and connected to the vessel, the protecting means being formed of a plurality of separate units suspended from each other, the separate units arranged to be movable in transverse direction with respect to the riser, the protecting means further being provided with a stretching means or a tensioning means (21,22) attached to a lower end of the protection means, the protection means being configured to retract to a protected position below the sea surface together with the riser when the riser is in the non-operative position, wherein the riser in the vicinity of the stretching or tensioning means is provided with a collar (14-17,26) designed to reduce detrimental impact of the stretching or tensioning means on the riser caused by relative movement of the stretching or tensioning means with respect to the riser. Re claim 2, the riser protection means is temporarily suspended from the vessel.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. in view of Ortloff et al. '919.

Butler et al. discloses the invention substantially as claimed. However, Butler et al. is silent about the riser (protection means) being suspended from a turret buoy. Ortloff et al teaches a riser (protection means) being suspended from a turret buoy (see Figs. 3, 5). It would have been considered obvious to one of ordinary skill in the art to modify Butler et al. by having the riser suspended from a turret buoy as taught by Ortloff et al. since such a modification allows for weathervane of the vessel.

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. in view of Poldervaart '781

Butler et al. discloses the invention substantially as claimed. However, Butler et al. is silent about the riser being moored to the seabed. Poldervaart teaches the riser (stretching means) being moored (3) to the seabed. It would have been considered obvious to one of ordinary skill in the art to modify Butler et al. by having the riser (stretching means) moored to the seabed as taught by Poldervaart since such a modification stabilizes the riser.



15. Claims 10,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. in view of Bennett '053

Butler et al. discloses the invention substantially as claimed. However, Butler et al. is silent about the protection means is conical and truncated. Bennett teaches protection means that is conical and truncated (see Fig. 8). It would have been considered obvious to one of ordinary skill in the art to modify Butler et al. to have conical and truncated protection means as taught by Bennett since such a modification is a mere design choice.

16. Claims 3,5,8-11, 13-15, 19,21,24-27,29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer '477.

With regards to claims 3,19, Fisher is silent about suspending the riser protection means from a turret loading buoy. It would have been considered obvious to one of ordinary skill in the art to modify Fischer by suspending the protection means from a turret buoy since such a modification accommodates rotatable motion of the vessel.

With regards to claims 5, 21, Fischer teaches mooring of the tension means (21) by member (22). However, Fischer is silent about the mooring means being wires. It would have been considered obvious to one of ordinary skill in the art to modify Fischer by using wires as the mooring means since such an arrangement is conventional.

With regards to claims 8-11,13-15, 24-27, 30,31, Fischer is silent about suspending the stretching/tensioning means and the hollow elements via chains or wires. It would have been considered obvious to one of ordinary skill in the art to modify Fischer by using

either chains or wires as the suspending means since such an arrangement provides additional securing means in the event the first securing means fail.

With regards to claim 13, 29, Fisher is silent about the hollow elements being internally coated to reduce friction. It would have been considered obvious to one of ordinary skill in the art to modify Fisher to internally coat the hollow elements in order to reduce friction caused by relative movement between the protection means and the riser.

### ***Response to Arguments***

17. Applicant's arguments with respect to claims 1 and 17 have been considered but are moot in view of the new ground(s) of rejection provided by Fischer '477.

18. Applicant's arguments filed 8/21/08 have been fully considered but they are not persuasive. Applicant's argument with regards to claim 1 is not persuasive because claim 1 was amended to include new matter; therefore, the rejections set forth above with respect to Butler et al. still apply. Applicant argues that member (36) cannot be considered as the "collar" because it is part of the tensioning means. It should be noted member (26,32,44,46) is considered as the tensioning means and member (36) as the "collar". It should be noted that there is not structural limitation claim(s) precluding such interpretation.

### ***Conclusion***

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/  
Primary Examiner, Art Unit 3672

Sunil Singh  
Primary Examiner  
Art Unit 3672

SS

4/9/09